

**Notice of Allowability**

Application No.

10/685,709

Examiner

Michael C. Maskulinski

Applicant(s)

JEONG, SEUNG-YOUL

Art Unit

2113

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/14/06.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of the:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

### **Reasons for Allowance**

1. Applicant's arguments, with respect to claims 1, 2, 7, 20 and 26 have been fully considered and are persuasive. The rejection of claims 1-4, 6, 7, 13-17, and 20-27 has been withdrawn.
2. Claims 1-27 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter.

Referring to claim 1, the prior art does not teach or reasonably suggest outputting the error information and the state information in real time to the outside via the second interface unit.

Referring to claim 7, the prior art does not teach or reasonably suggest a second interface unit outputting the error information and the state information provided by the state information manager in real time to the outside when an error occurs.

Referring to claim 9, the prior art does not teach or reasonably suggest a third controller controlling data recording and reproducing operations of the hard disk drive by using the first controller, and receiving the error information provided by the hard disk drive by using the second controller.

Referring to claim 12, the prior art does not teach or reasonably suggest a hard disk drive including first and second interface units to transmit data to and to receive data from a recording medium and outputting the error information and the state information to the outside via only the second interface unit.

Referring to claim 13, the prior art does not teach or reasonably suggest a second interface unit to output the error information and the state information to the outside in real time.

Referring to claim 14, the prior art does not teach or reasonably suggest a second interface unit to output the state information to the outside in real time.

Referring to claim 15, the prior art does not teach or reasonably suggest a second interface unit to output the error information in real time.

Referring to claim 18, the prior art does not teach or reasonably suggest in combination with the remaining limitations a third controller managing the first and second controllers.

Referring to claim 20, the prior art does not teach or reasonably suggest a second interface unit outputting the error information provided from the hard disk drive to the controller in real time.

Referring to claim 26, the prior art does not teach or reasonably suggest outputting the error information and the state information to the outside via only the second interface unit.

Referring to claim 27, the prior art does not teach or reasonably suggest a second interface unit to output the error information in real time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael C Maskulinski  
Examiner  
Art Unit 2113